CONNECTED THERMAL SOLUTIONS POWERED BY THERMAL IQTM

Unleash Your Thermal Process Data to Drive Better Business Outcomes



Honeywell



ELEVATE YOUR THERMAL INSIGHT QUOTIENT WITH CONNECTED THERMAL SOLUTIONS

Honeywell's Connected Thermal Solutions platform powered by Thermal IQ[™] automates the process of extracting thermal process data and helps you drive better business outcomes with real-time thermal analytics developed by Honeywell's thermal process experts.

- Deploying Thermal IQ platform helps ensure your facilities run safer, more reliable and efficient with greater capacity while becoming more competitive and profitable.
- Proactively identify and minimize the costs of thermal system related unplanned downtime.
- Centralized access to all thermal performance data.
- Scalable solutions customizable to every industry, organization, and role.

- Cloud-based, cyber secure delivery system allows you to quickly identify the worst performing assets and make all your assets the best performing ones.
- Fill knowledge gaps by leveraging the centralized thermal process insights from the Honeywell Thermal Solutions experts.
- Implement faster and more cost effective solutions by empowering your onsite and 3rd party service providers with the right information the first time.

CONNECTED THERMAL SOLUTIONS POWERED BY THERMAL IQ™ BRINGS NEXT LEVEL:

Safety and Operational Risk Management

- 100% compliance to procedures
- Up to 10% annual reduction in incidents.

Reliability and Operational Excellence

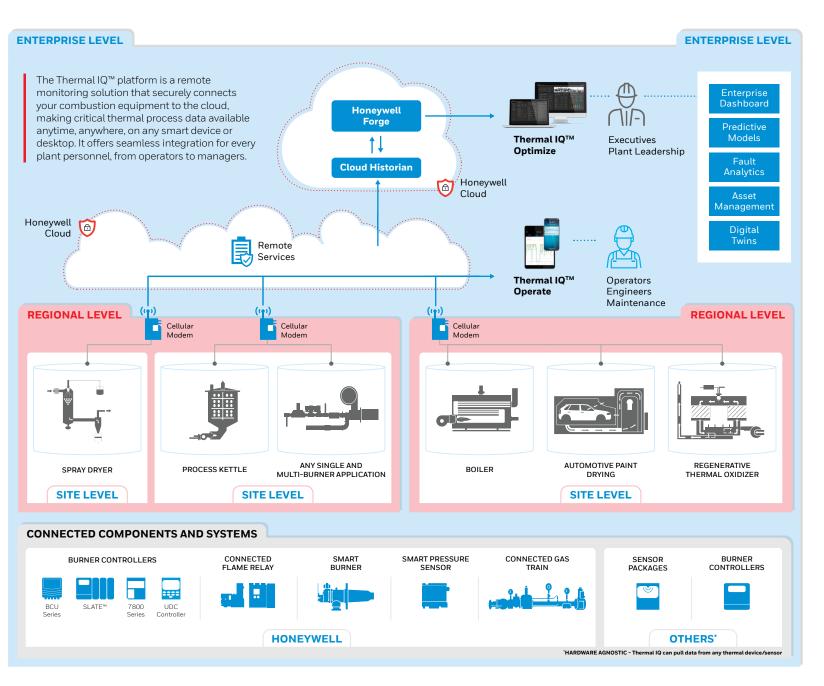
- Up to 50% reduction in unplanned downtime
- Up to 10% reduction in maintenance costs

Energy and Emissions Management

- Up to 5% reduced greenhouse gas emissions
- Up to 5% reduced energy costs

THERMAL IQ PLATFORM





THERMAL IQ OPERATE REAL-TIME ASSET PERFORMANCE MONITORING

FASTER SERVICE RESOLUTION WITH SMARTER MAINTENANCE

- Key information in the right hands at the right time
- Enterprise level benchmarking to find worst performing assets
- Better First Time Fix (FTF) metrics as technicians bring the right tools and parts the first time
- Easier remote technical expertise and support
- Stay ahead of problems with early alerts, analysis and recommendations about potential failures.

Reduction in service cycle times minimizes equipment downtime, **saving up to ~\$25K+ per installation per year** while increasing profitability.



GET THE RIGHT INFORMATION, IN THE RIGHT HANDS, **AT THE RIGHT TIME.**



MONITOR

See real-time and trending data, and get alerts when key parameters are outside normal limits.



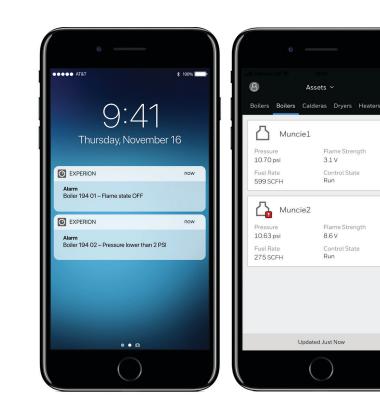
MANAGE

Connect everyone from management to maintenance with insights that drive smarter decisions.



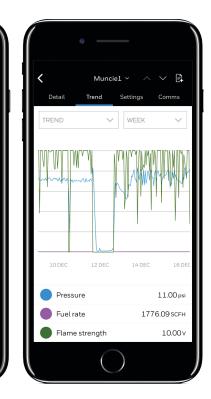
MAXIMIZE

Stop waiting for faults and failures that can lead to shutdowns – get ahead of trouble and maximize uptime.

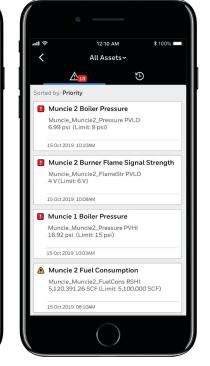


(!)

Get critical alerts and notifications right on your home screen



Munciel 🗸 🔿 🔀	
Detail Trend S	Settings Comms
Runtime today	7.683 hr
Runtime yesterday	23.983 hr
Lockout time today	0.000 hr
Lockout time yesterday	0.000 hr
ENERGY & BOILER TOTALS	; ^
Gas cost today	39.68 \$
Gas cost yesterday	68.48 \$
Steam cost today (\$/10K lbs)	48.96
Steam cost yesterday (\$/10K lbs)	48.74
Gas use today	9923 SCF
Gas use yesterday	17119 SCF
Steam use today	8104 lbs
Steam use yesterday	14048 lbs



3

See high-level overview of all your connected thermal process equipment



Drill down into each piece of thermal process equipment to see current alerts and status of key parameters



See which alarms have been configured with your current system



Track historical data and alarms by day, week or month to identify trends and opportunities for improvement



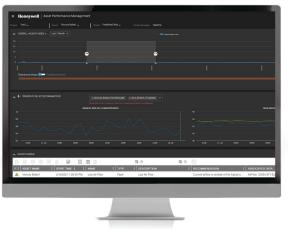
Get troubleshooting tips based upon the alert / alarm

THERMAL IQ OPTIMIZE ENTERPRISE ASSET PERFORMANCE S **& PROCESS MONITORING**

ACHIEVE ENHANCED ENTERPRISE SAFETY, RELIABILITY, AND **EFFICIENCY VIA CUSTOMIZED VISUALIZATION THROUGH A SINGLE LENS.**



Enterprise Dashboard with hierarchical view



Asset Analytics & Prediction powered by machine learning

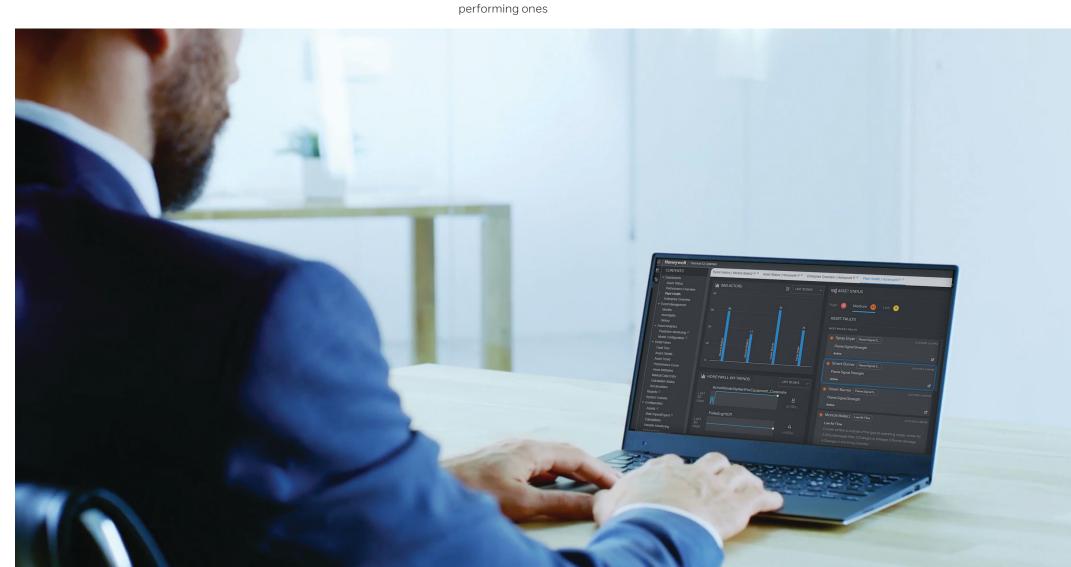


Operational Dashboard with real-time asset view

CORPORATE THERMAL TEAM MANAGER, GLOBAL MANUFACTURER

"As a business leader, Thermal IQ Optimize provides me the ability to quickly look at overall business performance. Organization visibility also increases collaboration across divisional and plant teams increasing productivity by proactively prioritizing the more reliable systems and plants based upon comparative metrics"





ACTIONABLE INTELLIGENCE FOR BETTER BUSINESS OUTCOMES



Cascading Performance Dashboards

Enterprise, Site, and Asset dashboards filter and cascade performance metrics for every role.

Customizable Architecture

Thermal IQ Optimize is scalable across systems and sites to fit the needs of your organizational dynamics and goals



 \sim

Interactive Fault Tree Analysis

Stay ahead of problems by predicting potential failures derived from built-in fault tree analysis and event specific troubleshooting recommendations.

Increase Productivity by benchmarking all

assets globally to find the worst performing

assets and make them as good as the best



Prepackaged and Customizable Analytics

Historical trending overlaid with analysis tools with machine learning capabilities, empowering leaders and data scientists who are protectively solving hidden and complex problems.



Driving Better Business Outcomes with HONEYWELL THERMAL IQ

Taking advantage of the Honeywell Thermal IQ platform means you are tapping into some of Honeywell's most powerful, advanced, and secure software platforms like Elevate, Sentience, and Asset Performance Management which are being used to safely and reliably operate the world's largest and most profitable companies.

Insight above. Performance beyond.

Elevate your Thermal IQ.

Visit <u>ThermalSolutions.Honeywell.com/TIQ</u> to learn more.

For more information

The Honeywell Thermal Solutions family of products includes Honeywell Combustion Controls, Honeywell Combustion Safety, Honeywell Combustion Service, Eclipse, Exothermics, Hauck, Kromschröder and Maxon. To learn more about our products, visit **ThermalSolutions.Honeywell.com** or contact your Honeywell Sales Engineer.

Honeywell Process Solutions

Honeywell Thermal Solutions (HTS) 2101 City West Blvd, Houston TX 77042 THE FUTURE IS WHAT WE MAKE IT



BR-20-02-ENG | 03/21 © 2021 Honeywell International Inc.

